Underreporting Occupational Exposure Incidents (5/11)

Kessler CS, McGuinn M, Spec A, Christensen J, Baragi R, Hershow RC. Underreporting of blood and body fluid exposures among health care students and trainees in the acute care setting: A 2007 survey. Am J Infect Control 2011;39:129–134.

Occupational exposure to bloodborne pathogens from needlesticks and other sharps injuries is a serious problem, but it is often preventable. The Centers for Disease Control and Prevention (CDC) estimates that each year 385,000 needlesticks and other sharps-related injuries are sustained by hospital-based health-care personnel. Similar injuries occur in other health-care settings, such as nursing homes, clinics, emergency care services, and private homes. Sharps injuries are primarily associated with occupational transmission of hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV).

It has been estimated that more than eight million health-care personnel (HCP) in the United States may be exposed to blood and body fluids via sharp

Occupational Exposure Incidents 9

- Percutaneous injury ¶
 - *Needlestick, puncture wound, or cut
- -·Splash·of·blood·or·body·fluid·onto¶
 - *Mucous membranes (eye, nose, or mouth) \(\)
 - *Nonintact'skin'(chapped, abraded, dermatitis)

Substances Posing Risk of Infection Transmission ¶

- Blood¶
- Fluids containing visible blood
- Potentially infectious fluids (semen; vaginal secretions; saliva; and cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids) or tissue¶
- -·Concentrated·virus¶

and mucocutaneous exposures. In the present study an anonymous questionnaire was distributed among 505 HCP. The target sample population included all the medical students; nursing professionals; dental professionals; and residents in internal medicine, emergency medicine, surgery, and obstetrics and gynecology at the University of Illinois Medical Center, Chicago, Illinois. The number and the characteristics of occupational exposures and reporting practices were recorded and compiled. The authors completed a review of the English literature to analyze reasons for underreporting. One hundred three of 455 (22.6%) HCP reported a sharps exposure during their career, including their student years; thirty-four (33%) of these were not reported. One hundred five of 455 (23.1%) HCP reported a mucocutaneous exposure during their career; 87 (82.9%) of these were not reported. The most common year of exposure was the intern year. The most common reason for not reporting was the belief that the exposure was not significant, followed by the combination of believing the exposure was not significant and being too busy. Underreporting of blood and body fluid exposures is common because of a belief that most exposures are not significant. Additional education of HCP is needed to change this perspective.

DECS Comment: Underreporting occupational blood and body fluid exposures is a well-known and long-standing problem with rates ranging from 17-97%. In the present study, dental health-care personnel (DHCP) did not report 25.6% of sharps injuries and 69.2% of mucocutaneous exposures. This is consistent with other studies involving DHCP. A very common reason for not reporting an injury is the perception of low risk. Other reasons for not reporting injuries include the perception that the injury/splash was minor; a "low-risk" patient was involved; the instrument was clean; they didn't know the protocol; and the paperwork would take too much time. This reinforces the need to educate DHCP about the risks of percutaneous and mucocutaneous injuries including the acquisition of bloodborne pathogens, the importance of reporting, and how to report occupational exposures at their facility. Click Here for resources on the DECS Web site to help with this training.